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09/842,248	04/26/2001	Kenichi Higashi	2185-0532P	7514

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EXAMINER

NAKARANI, DHIRAJLAL S

ART UNIT	PAPER NUMBER
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1773

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/842,248
Filing Date: April 26, 2001
Appellant(s): HIGASHI ET AL.

MAILED
AUG 28 2006
GROUP 1700

John W. Bailey
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 17, 2005 appealing from the Office action mailed April 26, 2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,725,712	SPAIN et al	03-1998
5,829,804	SAEKI et al	11-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Spain et al (U. S. Patent 5,725,712) in view of Saeki et al (U. S. Patent 5,829,804).

Spain et al disclose a laminate structure comprising carrier film such as polyester (col. 23, lines 49-50), coated with acrylic clear coat (45). Over the acrylic clear coat, an acrylic paint (colored) coat (46) applied. Size coat (47) applied over the paint coat and a backing sheet (72) is bonded to the size coat. The backing sheet (72) is considered equivalent claimed resin layer (B). Thus formed laminate is thermoformed into a three dimensional shape of an automobile part. The thermoformed part (without the carrier film) inserted into a mold, wherein the clear coat facing the mold surface and a thermoplastic resin is injected to form substrate (118) on the backing sheet (72) (Figure 12). Spain et al' method has similar steps as claimed in the instant invention (Col. 33, line 1 to col. 36, line 30). Spain et al's article is directed to a part of car such as bumpers, fender, quarter panel etc. (Example 13 and col. 39, lines 5-18). Spain et al also suggest that other articles can be made (col. 7, lines 53-58). Spain et al disclose thickness of clear coat (45) from about 0.5 to about 1.5 mils (i.e. about 12.5 to 38 microns) (col. 9, lines 24-25, col. 11, line 20), thickness of color coat (46) from about 0.5 to about 1.5 mils (col. 13, lines 56-57), thickness of size coat (47) from about 0.1 to about 1.0 mil (col. 16, lines 35-36) and thickness of backing sheet (72) from about 10 to about 40 mils with 20 mils thickness being preferred (col. 17 lines 36-38) (see Fig. 7). The backing sheet can be ABS, thermoplastic polyolefin, polyester, amorphous nylon

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etc. (Col. 17, lines 20-28 and col. 33, lines 1-40). Spain et al also suggest size coat of chlorinated polyolefin when backing sheet is a thermoplastic polyolefin. Spain et al suggest the backing sheet (72) made of same or substantially the same polymeric material as the substrate (118) base of the finished article (Col. 16, line 64 to col. 17, line 2). In Example 13, Spain et al disclose 500 microns (i.e. about 19.7 mils) thick backing sheet made of thermoplastic olefinic elastomer (RPI-E-1000) from Republic Plastics (col. 35, lines 55-63) and substrate of elastomeric thermoplastic alloy molding resin RTA 3263 (col. 36, lines 20-23). Spain et al disclose addition of pigments to the backing sheet (Col. 20, lines 33-41). Spain et al teach dry paint transfer techniques to produce exterior plastic car body members (col. 1, lines 18-25). Spain et al disclose that their paint transfer technique eliminates solvent emissions associated with spray painting (col. 1-33 lines 40-57). Spain et al also disclose that their paint system results in more durable and chemical resistant paint than that of conventional low temperature bake solvent based paint and eliminates adhesion problems associated with conventional spray paint (Col. 33, lines 40-57). Spain et al fail to disclose thermoplastic polypropylene backing sheet containing filler and thermoplastic elastomer.

Saeki et al teach polyolefin composition for making reduced wall thickness of automobile bumpers, which are also exterior plastic car body members (col. 2, lines 15-20). Saeki et al's composition provide paintable planar smooth surface (abstract), which can be painted with conventional spray paint by application of chlorinated polypropylene primer and low temperature bake paint such as urethane paint, acrylic paints etc (col. 7, line 58 to col. 8, line 6). Saeki et al also suggest use of pigment and fibrous fillers (col.

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7, lines 22-35). Saeki et al disclose addition of talc from 0.6 to 30 parts by weight per 100 parts by weight of the combination of components (A) and (B). The combination of components (A) and (B) are propylene resins (Col. 2 lines 40-50, col. 6 lines 20-24). Saeki et al's Example 1 shows 65 wt% of combined components (A) and (B), which meets claimed component (a) and 30 wt% ethylene-propylene copolymer rubber (EPM) as component (C), which meets claimed component (b) (col. 2, lines 50-51) and 5 wt % talc as filler, which meets claimed component (c).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of this invention made to utilize Saeki et al's compositions for making backing sheet (72) and for making substrate (118) of Spain et al for improved impact strength and improved surface quality. Since Spain et al's paint system results in improved adhesion over conventional solvent based low temperature baked spray paint, a person of ordinary skill in the art at the time of this invention made would have found it obvious to eliminate optional component (E) i. e. polyhydroxy polyolefin.

(10) Response to Argument

In reference to rejection of claims 1-19 under 35 USC § 103(a) as obvious over Spain et al (U. S. Patent 5,725,712) in view of Saeki et al (U. S. Patent 5,829,804), appellants mainly argue that Spain et al relates to dry paint transfer techniques while Saeki et al disclose an automobile bumpers made of a special resin composition that has an excellent paintability. Saeki et al only suggests incorporation of component (E) polyhydroxy polyolefin in a car bumper to provide the paintability of the bumper. Paintability in Saeki et al refers to traditional painting and does not refer to dry paint

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transfer or injection cladding. Thus Saeki et al teaches away from dry paint transfer and injection cladding. Saeki et al teaches away from using a composition that does not include component (E) where one is concerned with the adhesiveness between the size coat and the color coat as disclosed in Spain et al. Further appellants argue that Spain et al teach that incorporation of filler into a substrate causes the substrate to have an imperfect surface. Therefore incorporation of filler into a backing sheet makes the backing sheet imperfect and deteriorates the appearance. Thus Spain et al teach away from the incorporation of filler into a backing sheet. Appellants state that the resin layer (B) composition of present invention and the composition of Saeki et al are not the same due to presence of polyhydroxy polyolefin component E necessary for paintability.

These arguments are unpersuasive because the component (E) is not an essential component for paintability. As per Saeki et al paintability of bumper is improved by combined use of EPM and EPDM (col. 5 line 57 to col. 6, line 3). Saeki et al also suggest primer coat of acrylic-chlorinated polypropylene prior to painting. The primer coat of Saeki et al and size coat of Spain et al has an equivalent function that is to improve adhesion of paint or color coat to underlying substrate. Saeki et al do not teach or suggest to eliminate dry paint transfer. The component (E) is suggested by Saeki et al as an optional component to further improve adhesion of color coat to underlying substrate. Saeki et al's composition results in molded article having planar smooth surface (abstract). Saeki et al's component E is not essential component to obtain planar smooth surface. Therefore it would have been obvious to a person of ordinary skill in the art at the time of this invention made to utilize Saeki et al's

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composition without component E in the invention of Spain et al to make both, backing sheet and substrate using the same composition since Spain et al's paint system results in more durable and chemical resistant paint than that of conventional low temperature bake solvent based paint and eliminates adhesion problems associated with conventional spray paint.

(11) Related Proceeding(s) Appendix


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

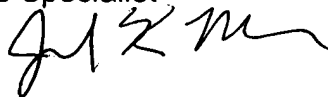
DSN

August 12, 2006


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